

Amendments to the Claims

This listing of the claims will replace all prior versions:

1. (currently amended) A method of temporarily attaching two components during an apparatus manufacturing process then more permanently attaching the two components during a subsequent portion of the apparatus manufacturing process, comprising:

tacking a first component and a second component with an adhesive during an initial phase of the apparatus manufacturing process, the tacking performed by applying a temperature of about 100-300 °C and a pressure of about 5-100 psi for about 5-120 seconds to the adhesive, first component, and then allowing at least a portion of the applied temperature and pressure to be transferred to the adhesive and the second component, the first component having a greater thermoeconductivity than the adhesive, which creates a bound component part; and

installing the bound component part into a machine as a constituent part of the machine; and

curing the adhesive in the bound component part by at least one of heating and applying pressure to at least a portion of the machine that contains the bound component part during a subsequent phase of the apparatus manufacturing process.

2. (original) The method of claim 1, wherein the first component is a conductor and the second component is an insulator.

3. (original) The method of claim 2, wherein the conductor is a copper strand and the insulator is an insulation strand.

4. (original) The method of claim 3, wherein the adhesive comprises a thermoset material.

5. (original) The method of claim 4, wherein the adhesive is selected from the group consisting of nitril, phenolic, epoxy, acrylic and the like.
6. (original) The method of claim 1, wherein the tacking is performed at a temperature of about 140-160 °C and a pressure of about 10-50 psi for about 15-45 seconds.
7. (original) The method of claim 1, wherein the tacking provides an adhesive bond strength of about 30-150 psi.
8. (currently amended) The method of claim 1, wherein the curing the adhesive in the bound component part subsequent manufacturing operation is a press and bake cycle of a rotor coil manufacturing process that imparts a temperature of about 100-500 °C and a pressure of about 100-1,500 psi to the rotor coil.
9. (original) The method of claim 8, wherein the press and bake cycle provides an adhesive bond strength of about 150-500 psi.
10. (canceled)
11. (currently amended) A method of manufacturing a rotor coil for use within a generator of a power generation plant, comprising:
 - arranging an adhesive between a strand of conductive material and a strand of insulation material;
 - applying a temperature of about 100-300 °C and a pressure of about 5-100 psi for about 5-120 seconds to the adhesive in order to tack the adhesive to the conductive and insulation materials, thereby forming an insulated conductor stack;
 - assembling a plurality of stacks to form a nascent rotor coil;
 - arranging the nascent rotor coil in a rotor slot; and

curing the adhesive after the coil is arranged within the rotor slot by at least one of heating and applying pressure to at least a portion of the coil that contains the plurality of stacks.

12. (original) The method of claim 11, wherein the adhesive comprises a thermoset material.

13. (original) The method of claim 12, wherein the adhesive is selected from the group consisting of nitril, phenolic, epoxy, acrylic and the like.

14. (original) The method of claim 11, wherein the tacking is performed at a temperature of about 140-160 °C and a pressure of about 10-50 psi for about 15-45 seconds.

15. (original) The method of claim 11, wherein about 5-20 stacks are arranged to form the nascent rotor coil.

16. (original) The method of claim 11, wherein the adhesive is fully cured during the press and back cycle of the rotor coil manufacturing process.

17. (Withdrawn.) A tacking apparatus, comprising:

a tray adapted to support at least a portion of a component to be tacked, the tray having a positioning device to help position the component on the tray and an urger to help secure the positioned component;

a movable ram adapted to directed a pressure of about 5-100 psi onto the component; and

a heater adapted to direct a temperature of about 100-300°C onto the component, whereby the directed heat and pressure tack the component, the component including at least two elements and an adhesive, and the adhesive fully cured subsequent to the tack.

18. (Withdrawn.) The apparatus of claim 17, wherein the positioning device is a plurality of dowels arranged on the surface of the tray.

19. (Withdrawn.) The apparatus of claim 17, wherein the urger is a plurality of spring-loaded snap-backs arranged on the surface of the tray.

20. (Withdrawn.) The apparatus of claim 17, wherein a frame is used to vertically elevate the tray.